Lot 5—Fields 1, 6, 7, 10, 13 and 14

FIELD WORKSHEET #1
GENERAL FORESTRY INFORMATION

Lot # 5 **Total Acres:** 264 **Field Number(s):** 1,6,7,10,13 and 14 **Acres:** 75 **Date:** 8/25/03

Reported By: Earth Spirit Educational Services, Inc.

Principal Species	DBH* (inches)	Density (Heavy, Medium, Light)	Growth Rate**	Age Class (Even/Mult.)	Age	Heights (feet) Crown/Usable		Condition (Good, Fair, Poor)
Red Pine	P-14	Heavy	17	Even	71	75		Good
Sugar Maple	S-22	Heavy	16	Multiple		70	36	Good
White Ash	P-20	Medium	13	Multiple		68	32	Good
Black Cherry	16-32	Medium	16	Multiple		67	34	Good

* "S" refers to saplings, "P" refers to pole size dimensions, "SL" refers to saw log dimensions
** Represents the most recent growth rings per inch from a core sample

Comments
These fields represent mature Red Pine (Pinus resinosa) Plantations with significant hardwood intrusion in all forest levels represented by Sugar Maple (Acer saccharum), White Ash (Fraxinus americana) and Black Cherry (Prunus serotina).
Note: A field exists in the northwest portion of this Lot that is not represented in the USDA 1965 report and map but is shown in the 2003 GIS map. This field will be incorporated into Field Number 7.

Aquatic Systems – includes both lentic (standing water) and lotic (flowing water) systems
None

Fire Lane Status
The Fire Break in Field Number 14 that borders Wilkins Road is completely overgrown and has generally evolved into a field border. The Fire Break that borders Field Numbers 14 and 15 is generally in good condition, approximately 18 feet wide and is in need of general clearing and pruning. The Fire Break in Field Number 10 is approximately 18 feet wide and is in need of general clearing and pruning.

Lot 5—Fields 1, 6, 7, 10, 13 and 14

FIELD WORKSHEET #2
ECOLOGICAL ANALYSIS

Ecological Overview

Forest Physiognomy (outer appearance)

Canopy

The canopy is of medium density and is characterized by the following dominant species of Red Pine (Pinus resinosa) along with Sugar Maple (Acer saccharum), White Ash (Fraxinus americana) and Black Cherry (Prunus serotina).

Subcanopy

The subcanopy is of heavy density and is represented primarily by Sugar Maple (Acer saccharum).

Shrub Layer

The shrub layer is of light density and includes scattered Brambles (Rubus spp).

Herbaceous Layer

The herbaceous layer is of medium density and is dominated by a variety of ferns such as Evergreen Woodfern (Dryopteris intermedia), Sensitive fern (Onoclea sensibilis), Christmas fern (Polystichum acrostichoides), Lady fern (Athyrium Filix-femina) and Crested fern (Dryopteris cristata).

Successional Status

These fields represent mature Red Pine (Pinus resinosa) Plantations in the mid - late stages of hardwood succession and will continue to evolve into a hardwood dominated Climax Forest. Hardwood intrusion is medium to heavy in the canopy and significant throughout the subcanopy.

Botanical Concerns - includes both invasive and protected species

Invasive: Garlic Mustard (Alliaria officinalis)

Protected: All ferns listed under "Herbaceous Layer" except Sensitive fern (Onoclea sensibilis).

Lot 5—Field 2

FIELD WORKSHEET #1
GENERAL FORESTRY INFORMATION

Lot # 5 **Total Acres:** 264 **Field Number(s):** 2 **Acres:** 70 **Date:** 8/25/03

Reported By: Earth Spirit Educational Services, Inc.

Principal Species	DBH* (inches)	Density (Heavy, Medium, Light)	Growth Rate**	Age Class (Even/Mult.)	Age	Heights (feet) Crown/Usable		Condition (Good, Fair, Poor)
Sugar Maple	12-24	Heavy	16	Multiple		70	34	Good
American Beech	S-18	Heavy	14	Multiple		62	26	Fair
Bitternut Hickory	12-18	Medium	13	Multiple		72	42	Good
Basswood	14-28	Light	15	Multiple		72	36	Good

* "S" refers to saplings, "P" refers to pole size dimensions, "SL" refers to saw log dimensions
** Represents the most recent growth rings per inch from a core sample

Comments
This field represents a mature Hardwood Forest dominated by Sugar Maple (Acer saccharum) and American Beech Fagus grandifolia).

Aquatic Systems – includes both lentic (standing water) and lotic (flowing water) systems
None

Fire Lane Status
The Fire Break in this field borders Field Number 10 and is generally overgrown and in need of widening, clearing and pruning. All Terrain Vehicles have created trails throughout this field but no true Fire Breaks exist within the field. ATV use is strictly prohibited on County Forest Lots and violators will be prosecuted.

Lot 5—Field 2

FIELD WORKSHEET #2
ECOLOGICAL ANALYSIS

Ecological Overview

Forest Physiognomy (outer appearance)

Canopy

The canopy is of heavy density and is characterized by Sugar Maple (Acer saccharum), American Beech (Fagus grandifolia), Bitternut Hickory (Carya cordiformis) and American Basswood (Tilia americana).

Subcanopy

The subcanopy is of medium density and is represented by a variety of hardwood species such as Sugar Maple (Acer saccharum) and American Beech (Fagus grandifolia).

Shrub Layer

The shrub layer is generally not present.

Herbaceous Layer

The herbaceous layer is generally not present.

Successional Status

This field represents a mature Hardwood Forest that continues to evolve into a Maple/Beech Climax forest.

Botanical Concerns - includes both invasive and protected species

Invasive: None

Protected: None

Lot 5—Fields 3 and 5

FIELD WORKSHEET #1
GENERAL FORESTRY INFORMATION

Lot # 5 **Total Acres:** 264 **Field Number(s):** 3,5 **Acres:** 8 **Date:** 8/25/03

Reported By: Earth Spirit Educational Services, Inc.

Principal Species	DBH* (inches)	Density (Heavy, Medium, Light)	Growth Rate**	Age Class (Even/Mult.)	Age	Heights (feet) Crown/Usable	Condition (Good, Fair, Poor)
Norway Spruce	P-20	Heavy	26	Even	71	68	Good

* "S" refers to saplings, "P" refers to pole size dimensions, "SL" refers to saw log dimensions
** Represents the most recent growth rings per inch from a core sample

Comments
These fields represent mature Norway Spruce (Picea abies) Plantations generally absent of hardwood intrusion. Note: There are two active deer stands in Field Number 3. Hunting is strictly prohibited on County Forest property and violators will be prosecuted.

Aquatic Systems – includes both lentic (standing water) and lotic (flowing water) systems
None

Fire Lane Status
There are two Fire Breaks bordering the north and west boundaries of Field Number 3. Both Fire Breaks are 33 feet wide and are in need of significant clearing and pruning.

Lot 5—Fields 3 and 5

FIELD WORKSHEET #2
ECOLOGICAL ANALYSIS

Ecological Overview

Forest Physiognomy (outer appearance)

Canopy
The canopy is of heavy density and is characterized by mature Norway Spruce (Picea abies).

Subcanopy
The subcanopy is not present.

Shrub Layer
The shrub layer is not present.

Herbaceous Layer
The herbaceous layer is not present.

Successional Status

These fields represent mature and densely planted Norway Spruce (Picea abies) Plantations. At present, a dense canopy has restricted hardwood intrusion.

Botanical Concerns - includes both invasive and protected species

Invasive: None
Protected: None

Lot 5—Fields 4 and 12

FIELD WORKSHEET #1
GENERAL FORESTRY INFORMATION

Lot # 5 **Total Acres:** 264 **Field Number(s):** 4, 12 **Acres:** 28 **Date:** 8/26/03

Reported By: Earth Spirit Educational Services, Inc.

Principal Species	DBH* (inches)	Density (Heavy, Medium, Light)	Growth Rate**	Age Class (Even/Mult.)	Age	Heights (feet) Crown/Usable	Condition (Good, Fair, Poor)
White Pine	P-14	Medium	18	Even	71	68	Poor
Black Cherry	P-25	Medium	10	Multiple		67 36	Good
Sugar Maple	S/P	Light		Multiple			Poor
American Beech	S/P	Light		Multiple			Poor

* "S" refers to saplings, "P" refers to pole size dimensions, "SL" refers to saw log dimensions
** Represents the most recent growth rings per inch from a core sample

Comments
These fields represent mature White Pine (Pinus strobus) Plantations with a significant intrusion of Black Cherry (Prunus serotina). Note: Field Number 12, as shown in the 1965 USDA map, is not included in the updated 2003 GIS map.

Aquatic Systems – includes both lentic (standing water) and lotic (flowing water) systems
Field Number 4 contains a northwesterly flowing intermittent stream.

Fire Lane Status
The Fire Break in Field Number 4 that forms its western boundary is a continuation of the Field Number 3 Fire Break. This portion of the Fire Break is in need of significant widening, clearing and pruning. The two interior Fire Breaks have become All Terrain Vehicle paths and are generally in need of moderate clearing and pruning. ATV use is strictly prohibited on County Forest property and violators will be prosecuted.

Lot 5—Fields 4 and 12

FIELD WORKSHEET #2
ECOLOGICAL ANALYSIS

Ecological Overview

Forest Physiognomy (outer appearance)

Canopy

The canopy is of medium density and is characterized by the dominant species of White Pine (Pinus strobus) along with a significant intrusion of Black Cherry (Prunus serotina).

Subcanopy

The subcanopy is of heavy density and is represented by a variety of hardwood species.

Shrub Layer

The shrub layer is of light density and includes Dogwoods (Cornus spp.) and Tartarian Honeysuckle (Lonicera tartarica).

Herbaceous Layer

The herbaceous layer is of medium density and is dominated by a variety of ferns such as Sensitive fern (Onoclea sensibilis), Christmas fern (Polystichum acrostichoides), Crested fern (Dryopteris cristata) and Lady fern (Athyrium Filix-femina).

Successional Status

These fields represent mature White Pine (Pinus strobus) Plantations in the mid - late stages of hardwood succession.

Botanical Concerns - includes both invasive and protected species

Invasive: Tartarian Honeysuckle (Lonicera tartarica)

Protected: All ferns listed under "Herbaceous Layer" except Sensitive fern (Onoclea sensibilis).

Lot 5—Field 8

FIELD WORKSHEET #1
GENERAL FORESTRY INFORMATION

Lot # 5 **Total Acres:** 264 **Field Number(s):** 8 **Acres:** 5 **Date:** 8/25/03

Reported By: Earth Spirit Educational Services, Inc.

Principal Species	DBH* (inches)	Density (Heavy, Medium, Light)	Growth Rate**	Age Class (Even/Mult.)	Age	Heights (feet) Crown/Usable		Condition (Good, Fair, Poor)
Austrian Pine	P-18	Heavy	11	Even	71	68		Good
Black Cherry	S-20	Light - Medium		Multiple		70	32	Good
Red Maple	P-18	Light - Medium		Multiple		70	34	Good

* "S" refers to saplings, "P" refers to pole size dimensions, "SL" refers to saw log dimensions
** Represents the most recent growth rings per inch from a core sample

Comments
This field represents a mature Austrian Pine (Pinus nigra) Plantation with hardwood intrusions of both Black Cherry (Prunus serotina) and Red Maple (Acer rubrum) in the canopy.

Aquatic Systems – includes both lentic (standing water) and lotic (flowing water) systems
This field contains a northeasterly flowing four season stream between Field Numbers 8 and 9.

Fire Lane Status
The Fire Break in this field is approximately 15-19 feet wide and is in need of moderate widening, clearing and pruning.

Lot 5—Field 8

FIELD WORKSHEET #2
ECOLOGICAL ANALYSIS

Ecological Overview

Forest Physiognomy (outer appearance)

Canopy

The canopy is of medium density and is characterized by Austrian Pine (Pinus nigra) along with hardwood intrusions of Black Cherry (Prunus serotina) and Red Maple (Acer rubrum).

Subcanopy

The subcanopy is of medium density and is represented by Sugar Maple (Acer saccharum), White Ash (Fraxinus americana) and Black Cherry (Prunus serotina).

Shrub Layer

The shrub layer is of medium - heavy density and includes Multiflora Rose (Rosa multiflora), Dogwoods (Cornus spp.), Tartarian Honeysuckle (Lonicera tartarica), Witch-Hazel (Hamamelis virginiana) and Brambles (Rubus spp.).

Herbaceous Layer

The herbaceous layer is of light - medium density and is dominated by a variety of ferns such as Crested fern (Dryopteris cristata), Sensitive fern (Onoclea sensibilis), New York fern (Thelypteris noveboracensis) and Evergreen Woodfern (Dryopteris intermedia).

Successional Status

This field represents a mature Austrian Pine (Pinus nigra) Plantation in the mid - late stages of hardwood succession.

Botanical Concerns - includes both invasive and protected species

Invasive: Tartarian Honeysuckle (Lonicera Tartarica) and Multiflora Rose (Rosa multiflora)
Protected: All ferns listed under "Herbaceous Layer" except Sensitive fern (Onoclea sensibilis).

Lot 5—Field 9

FIELD WORKSHEET #1
GENERAL FORESTRY INFORMATION

Lot # 5 **Total Acres:** 264 **Field Number(s):** 9 **Acres:** 10 **Date:** 8/25/03

Reported By: Earth Spirit Educational Services, Inc.

Principal Species	DBH* (inches)	Density (Heavy, Medium, Light)	Growth Rate**	Age Class (Even/Mult.)	Age	Heights (feet) Crown/Usable	Condition (Good, Fair, Poor)
Scotch Pine	P-12	Medium - Heavy	17	Even	54	68	Fair
Bigtooth Aspen	12-16	Light		Multiple			Poor
American Beech	S/P	Light		Multiple			Poor
Red Maple	P-14	Light		Multiple			Poor

* "S" refers to saplings, "P" refers to pole size dimensions, "SL" refers to saw log dimensions
** Represents the most recent growth rings per inch from a core sample

Comments
This field represents a mature Scotch Pine (Pinus sylvestris) Plantation with light intrusions of Pioneer and Secondary Hardwoods such as Bigtooth Aspen (Populus grandidentata) and Red Maple (Acer rubrum). This field is generally wet as a result of drainage from the Marsh Community in Field Number 11.

Aquatic Systems – includes both lentic (standing water) and lotic (flowing water) systems
This field contains a northeasterly flowing four season stream that drains from the Marsh Community in Field Number 11.

Fire Lane Status
The Fire Break in this field is approximately 20 feet wide and is in need of significant clearing and pruning.

Lot 5—Field 9

FIELD WORKSHEET #2
ECOLOGICAL ANALYSIS

Ecological Overview

Forest Physiognomy (outer appearance)

Canopy

The canopy is of medium density and is represented by Scotch Pine (Pinus sylvestris) along with light intrusions of Bigtooth Aspen (Populus grandidentata) and Red Maple (Acer rubrum).

Subcanopy

The subcanopy is of medium density and is represented by a variety of hardwood species including Red Maple (Acer rubrum), Black Cherry (Prunus serotina) and American Beech (Fagus grandifolia).

Shrub Layer

The shrub layer is of medium - heavy density and includes Multiflora Rose (Rosa Multiflora), Dogwoods (Cornus spp.), Brambles (Rubus spp.) and Tartarian Honeysuckle (Lonicera tartarica).

Herbaceous Layer

The herbaceous layer is of medium density and is dominated by a variety of ferns such as Evergreen Woodfern (Dryopteris intermedia), Sensitive fern (Onoclea sensibilis), Cinnamon fern (Osmunda cinnamomea) and Marsh fern (Thelypteris palustris) along with Meadow Horsetail (Equisetum pratense).

Successional Status

This field represents a mature Scotch Pine (Pinus sylvestris) Plantation in the mid stages of hardwood succession with light intrusions of Pioneer and Secondary Hardwoods present in the canopy.

Botanical Concerns - includes both invasive and protected species

Invasive: Tartarian Honeysuckle (Lonicera tartarica) and Multiflora Rose (Rosa multiflora)

Protected: All ferns and horsetails under the "Herbaceous Layer" except Sensitive fern (Onoclea sensibilis).

Lot 5—Field 11

FIELD WORKSHEET #1
GENERAL FORESTRY INFORMATION

Lot # 5 **Total Acres:** 264 **Field Number(s):** 11 **Acres:** 6 **Date:** 8/25/03

Reported By: Earth Spirit Educational Services, Inc.

Principal Species	DBH* (inches)	Density (Heavy, Medium, Light)	Growth Rate**	Age Class (Even/Mult.)	Age	Heights (feet) Crown/Usable	Condition (Good, Fair, Poor)
(see below)							

* "S" refers to saplings, "P" refers to pole size dimensions, "SL" refers to saw log dimensions
** Represents the most recent growth rings per inch from a core sample

Comments
This field represents a Marsh/Wet Thicket Community characterized by a wide variety of emergent plants and wetland shrubs.

Aquatic Systems – includes both lentic (standing water) and lotic (flowing water) systems (see above)

Fire Lane Status
The Fire Break in Field Number 11 borders Wilkins Road and has generally evolved into a field border.

Lot 5—Field 11

FIELD WORKSHEET #2
ECOLOGICAL ANALYSIS

Ecological Overview

Forest Physiognomy (outer appearance)

Canopy
The canopy is not present.

Subcanopy
The subcanopy is not present.

Shrub Layer
The shrub layer is of medium density and includes Common Elderberry (Sambucus canadensis) and Silky Dogwood (Cornus amomum).

Herbaceous Layer
The herbaceous layer is of heavy density and is dominated by a variety of ferns such as Lady fern (Athyrium Filix-femina), Cinnamon fern (Osmunda cinnamomea), Evergreen Woodfern (Dryopteris intermedia) and Sensitive fern (Onoclea sensibilis) along with a variety of emergent plants.

Successional Status

This field represents a Marsh/Wet Thicket Community that will gradually fill in and evolve into a more mesic Shrubland/Young Forest.

Botanical Concerns - includes both invasive and protected species

Invasive: None
Protected: All ferns listed under "Herbaceous Layer" except Sensitive fern (Onoclea sensibilis).

Lot 5—Field 15

FIELD WORKSHEET #1
GENERAL FORESTRY INFORMATION

Lot # 5 **Total Acres:** 264 **Field Number(s):** 15 **Acres:** 54 **Date:** 8/28/03

Reported By: Earth Spirit Educational Services, Inc.

Principal Species	DBH* (inches)	Density (Heavy, Medium, Light)	Growth Rate**	Age Class (Even/Mult.)	Age	Heights (feet) Crown/Usable		Condition (Good, Fair, Poor)
Sugar Maple	S-19	Heavy	25	Multiple		88	42	Good
Black Cherry	P-22	Heavy	16	Multiple		78	40	Good
White Ash	P-18	Medium	13	Multiple		80	37	Good
American Beech	P-14	Light	18	Multiple		85	47	Good

* "S" refers to saplings, "P" refers to pole size dimensions, "SL" refers to saw log dimensions
** Represents the most recent growth rings per inch from a core sample

Comments
This field represents a mature mixed Hardwood Forest with the dominant species of Sugar Maple (Acer saccharum), Black Cherry (Prunus serotina), White Ash (Fraxinus americana) and American Beech (Fagus grandifolia) along with Eastern Hemlock (Tsuga canadensis), a conifer associate. The Hardwood Forests in this field drain directly into a sensitive Bog Ecosystem.

Aquatic Systems – includes both lentic (standing water) and lotic (flowing water) systems
This field contains the "Holland Bog," an extremely unique and uncommon ecosystem in Western New York.

Fire Lane Status
The Fire Break in this field parallels Wilkins Road and has evolved into an edge border. The Fire Break that heads south from Wilkins Road is approximately 18 feet wide and is in need of widening, clearing and pruning.

Lot 5—Field 15

FIELD WORKSHEET #2
ECOLOGICAL ANALYSIS

Ecological Overview

Forest Physiognomy (outer appearance)

Canopy

The canopy is of heavy density and is characterized by Sugar Maple (Acer saccharum), Black Cherry (Prunus serotina), White Ash (Fraxinus americana) and American Beech (Fagus grandifolia). The canopy is not present in the Bog portion of this field.

Subcanopy

The subcanopy is of light density and is represented by Sugar Maple (Acer saccharum) and American Beech (Fagus grandifolia). The subcanopy is not present in the Bog portion of this field.

Shrub Layer

The shrub layer is of light density and includes Brambles (Rubus spp.), Dogwoods (Cornus spp.) and Mapleleaf Viburnum (Viburnum acerifolium). The shrub layer is of heavy density in the Bog portion of this field and is dominated by Red Chokeberry (Pyrus arbutifolia) and other wetland shrubs.

Herbaceous Layer

The herbaceous layer is of light - medium density and is dominated by a variety of ferns such as Hayscented fern (Dennstaedtia punctilobula), New York fern (Thelypteris noveboracensis), Bracken fern (Pteridium aquilinum), Evergreen Woodfern (Dryopteris intermedia) and Cinnamon fern (Osmunda cinnamomea) along with Tree Clubmoss (Lycopodium obscurum) and a variety of scattered herbs. The herbaceous layer is of heavy density in the Bog portion of this field and is characterized by typical bog plants that thrive in acidic environments.

Successional Status

This field represents a mature mixed Hardwood Forest that is gradually evolving into a Maple dominated Climax Forest. The Bog portion of this field will eventually fill in and further evolve (barring shifts in drainage patterns) into a drier, more alkaline wetland environment.

Botanical Concerns - includes both invasive and protected species

Invasive: Garlic Mustard (Alliaria officinalis)

Protected: All ferns and clubmosses listed under "Herbaceous Layer" except Hayscented fern (Dennstaedtia punctilobula) and Bracken fern (Pteridium aquilinum). The "Holland Bog," though not analyzed as part of this survey, undoubtedly possesses an abundance of protected plant species.

Lot 5 Summary and Recommendations

FIELD WORKSHEET #3
WILDLIFE SUMMARY

Lot # 5 offers an excellent variety of habitats for diverse populations of wildlife species. Field Numbers 1, 3-10 and 12-14 represent mature Conifer Plantations in various stages of hardwood succession. Field Numbers 2 and 15 represent mature mixed Hardwood Forests while Field Number 11 includes a Marsh/Wet Thicket Community. Note: Field Number 15 contains the "Holland Bog," an extremely unique and uncommon ecosystem in Western New York.

During a period of three days, staff ecologists recorded a variety of wildlife observations focused upon actual sightings and other wildlife "signs". The following list represents a brief overview of those encounters focused upon Mammals, Birds and Reptiles/Amphibians.

Mammals

Whitetail Deer (Odocoileus virginianus)
Gray Squirrel (Sciurus carolinensis)
Red Squirrel (Tamiasciurus hudsonicus)
Red Fox (Vulpes fulva)
Raccoon (Procyon lotor)
Eastern Chipmunk (Tamias striatus)

Birds

Wild Turkey (Meleagris gallopavo)
Pileated Woodpecker (Dryocopus pileatus)
Eastern Phoebe (Sayornis phoebe)
Redtail Hawk (Buteo jamaicensis)
Red-eyed Vireo (Vireo olivaceus)
Blue Jay (Cyanocitta cristata)
Black-capped Chickadee (Parus atricapillus)
Dark-eyed Junco (Junco hyemalis)
Great Crested Flycatcher (Myiarchus crinitus)
Turkey Vulture (Cathartes aura)
Hermit Thrush (Catharus guttatus)
Gray Catbird (Dumetella carolinensis)

Reptiles/Amphibians

Spring Peeper (Hyla crucifer)
American Toad (Bufo americanus)
Green Frog (Rana clamitans melanota)

FIELD WORKSHEET #4
RECOMMENDATIONS

The following recommendations for Lot # 5 of the Erie County Forestry Management Plan are based upon field data collected by Earth Spirit Educational Services, Inc. in the areas of Forest Ecology, Wildlife Biology and general Ecology.

Field Numbers 1, 6, 7, 10, 13 and 14

Description - These fields represent mature Red Pine (Pinus resinosa) Plantations in the mid - late stages of hardwood succession.

Recommendations - These fields of mature Red Pine are currently experiencing significant hardwood intrusions resulting in general decline. As a result, these plantations should be actively managed. Selected hardwoods, especially Sugar Maple, Black Cherry and White Ash may also receive a selective thinning. The northern boundary of Field Numbers 6 and 7 and the western boundary of Field Number 4 should be surveyed in order to determine if illegal logging is presently taking place on Erie County property.

Field Number 2

Description - This field represents a mature Hardwood Forest dominated by Sugar Maple (Acer saccharum) and American Beech (Fagus grandifolia).

Recommendations – This field represents an excellent opportunity for the selective harvest of mature mixed hardwoods.

Field Numbers 3 and 5

Description - These fields represent mature Norway Spruce (Picea abies) Plantations generally absent of hardwood intrusion.

Recommendations - These fields of mature Norway Spruce are currently experiencing slow growth and general decline and as a result, these plantations should be actively managed.

Field Numbers 4 and 12

Description - These fields represent mature White Pine (Pinus strobus) Plantations with significant intrusions of Black Cherry (Prunus serotina).

Recommendations – These fields of mature White Pine are currently experiencing general decline and substantial weevil damage. As a result, these fields should remain without treatment in order to promote habitat diversity for local wildlife. The Black Cherry in these fields are in good condition and may receive a selective thinning

Lot 5
Soils, Waterways and Topography

Soils

The northern portion of the lot contains large areas of the well drained, moderately permeable, and highly erodible Hudson Silty Clay Loam (HvD), 15-25% slopes, the somewhat poorly drained, slowly permeable, potentially highly erodible Rhinebeck Silt Loam (RgB), 3-8% slopes, and the somewhat poorly drained, slowly permeable, and highly erodible Rhinebeck Silty Clay Loam (RhC3), with 8-15% slopes. Also included are fingers of the well drained, moderately permeable and highly erodible Chenango Gravelly Loam (CkC), 8-15% slopes, and moderately well drained, moderately slow permeating, and potentially highly erodible Collamer Silt Loam (CsB), 3-8% slopes, in the gullies. An east-west flowing stream cuts through the poorly drained Canadice Silt Loam (Ca), a hydric soil with moderately slow permeability and high clay content. South of Wilkins Road the lot contains a New York State wetland dominated by the hydric Palms Muck (Pa), a very poorly drained organic soil. Other soils include the well drained, moderate to rapidly permeable, and highly erodible Chenango Gravelly Loam (CkC and CkD) and Valois Gravelly Silt Loam (VaC), 8-25% slopes, and the somewhat poorly drained, moderately permeable Red Hook Silt Loam (Re). Forest management in this lot may be challenged by the wetness and erodibility of the soils.

Waterways and Topography

An unnamed Class C tributary to Buffalo Creek flows through the northern section of the lot. The stream has a fairly steep northern bank, rising to a small hill. South of the stream the rolling landscape rises toward Wilkins Road, which bisects the lot, and a forested New York State wetland dominates the lot south of Wilkins Road. Buffalo Creek is a Class A stream, protected as a drinking water source, and thermal pollution from opening up tree cover, especially adjacent to streams, is the primary pollutant.

Lot 5
Forest Stewardship Recommendations

General
This Lot needs to have boundary lines verified and marked, preferably with paint. There appears to be a few acre portion of the Lot in Wyoming County. There also has been considerable cutting to the north, some very fresh, some a few years old. Wilkins Rd. access is barely passable with a single lane of ruts and potholes.

Stand A (Old Fields 1, 6, 7, 10, 13, 14) **MEDIUM PRIORITY**
This large stand was a red pine plantation that now has considerable hardwood ingrowth at all levels. The pines were not thinned, so the live crown ratio is 20% and less and the average diameters are relatively small and under 16". With such a developed hardwood component, release from the pines can be accomplished with patch cutting. Scattered sawlog-sized black cherry, sugar maple and white ash can provide valuable seed if retained when the pines are removed in patch cutting. If enough mature hardwoods are available, some may be able to be removed with the pines. The sections bordering wetlands of Stands G and H must have a no-cut buffer around the wetland of at least 100 feet. Due to the large size of this stand, conversion could be spread over several years, perhaps 5, and still allow development of an even-aged hardwood stand.

Stand B (Old Field 2) **MEDIUM PRIORITY**
This uneven-aged hardwood stand has sugar maple, beech, bitternut hickory and basswood up to large sawlog sizes. The beech is diseased and poor quality. The understory is light beech and sugar maple saplings. The financially mature sawlogs and smaller poor quality trees should be removed in a selection harvest, but the priority is only medium. This means that a harvest need not be scheduled immediately since many trees are not yet prime. If time allows, timber stand improvement could precede the harvest to cull out many of the defective trees. Maintain a buffer around the wetland.

Stand C (Old Fields 3, 5) **MEDIUM PRIORITY**
This Norway spruce plantation has the typical vacant understory of a closed canopy stand. It also has the typical wide variation in diameters. Because no hardwoods have coexisted with the spruces, there may be very little seed in the litter for advanced hardwood reproduction. Since part may be within the protected wetland, all the spruce cannot be removed. It may be wiser to perform a low thinning, removing small diameter spruces to allow some light to penetrate the canopy to stimulate whatever seed is available. The dominant spruce canopy can then be removed once an adequate hardwood understory is evident and compliant with wetland regulations. Field check 5 years after thinning.

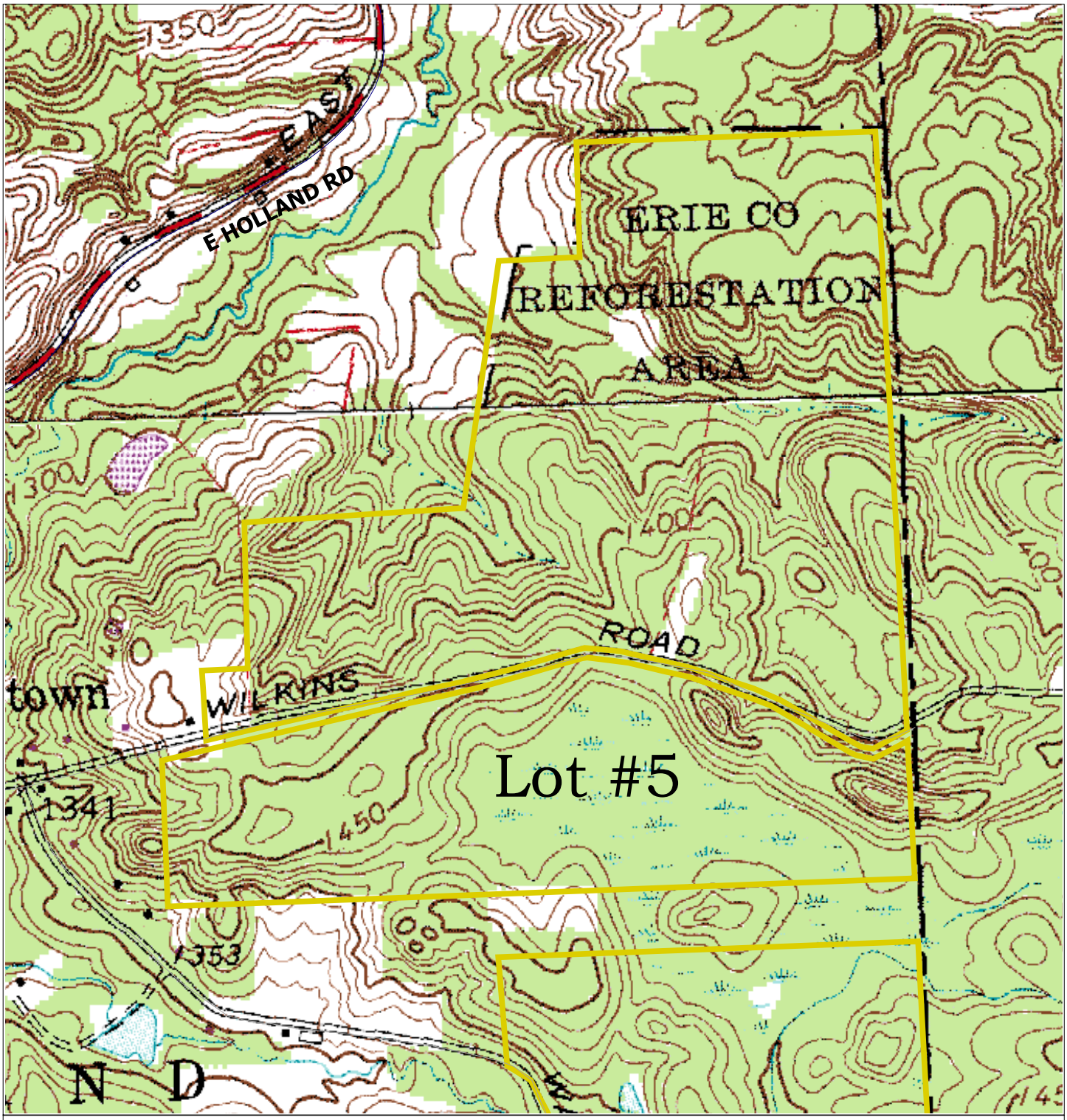
Stand D (Old Fields 4, 12) **LOW PRIORITY**
This stand is similar to a stand in Lot 2. The white pine is severely deformed, but has values other than timber. The worst pines should be removed with timber stand improvement in situations which would release adjacent or understory hardwoods of good quality. If possible, retain scattered, dominant pines of reasonable form.

Stand E (Old Field 8) **MEDIUM PRIORITY**
This stand contains mature Austrian pine with codominants and understory of mixed hardwoods. Since the hardwood regeneration is reasonably developed, the stand should be converted to hardwoods with a patch system.

Stand F (Old Field 9)
This stand is on a wet, low productivity site which is part of the Class 2 wetland. The mature Scotch pines and short lived aspens will be replaced by red maples and the beech will most likely succumb to beech bark disease. While the aspens, beech and red maple have fairly low timber value, they do have considerable value as wildlife food. No actions are recommended at this time since higher priority situations and sites are available.

Stand G (Old Field 11)
This Class 2 wetland contains a thick cover of shrubs and small trees on hummocks. Common are tamarack, red maple and red stemmed dogwood. There is no prospect of merchantable timber and the stand is best left undisturbed.

Stand H (Old Field 15)
This area is dominated by a sphagnum bog surrounded by sloped uplands, which is all within a Class 1 protected wetland. The bog contains typical vegetation, including white pine and tamarack. The upland slope is uneven-aged hardwoods, with diameters up to medium sawtimber size. This stand should remain undisturbed and protected to preserve the fragile environment and species diversity and to allow opportunities for controlled ecological study. While there is valuable cherry sawtimber here, the upland hardwoods on the slope should be retained as a buffer and not disturbed.



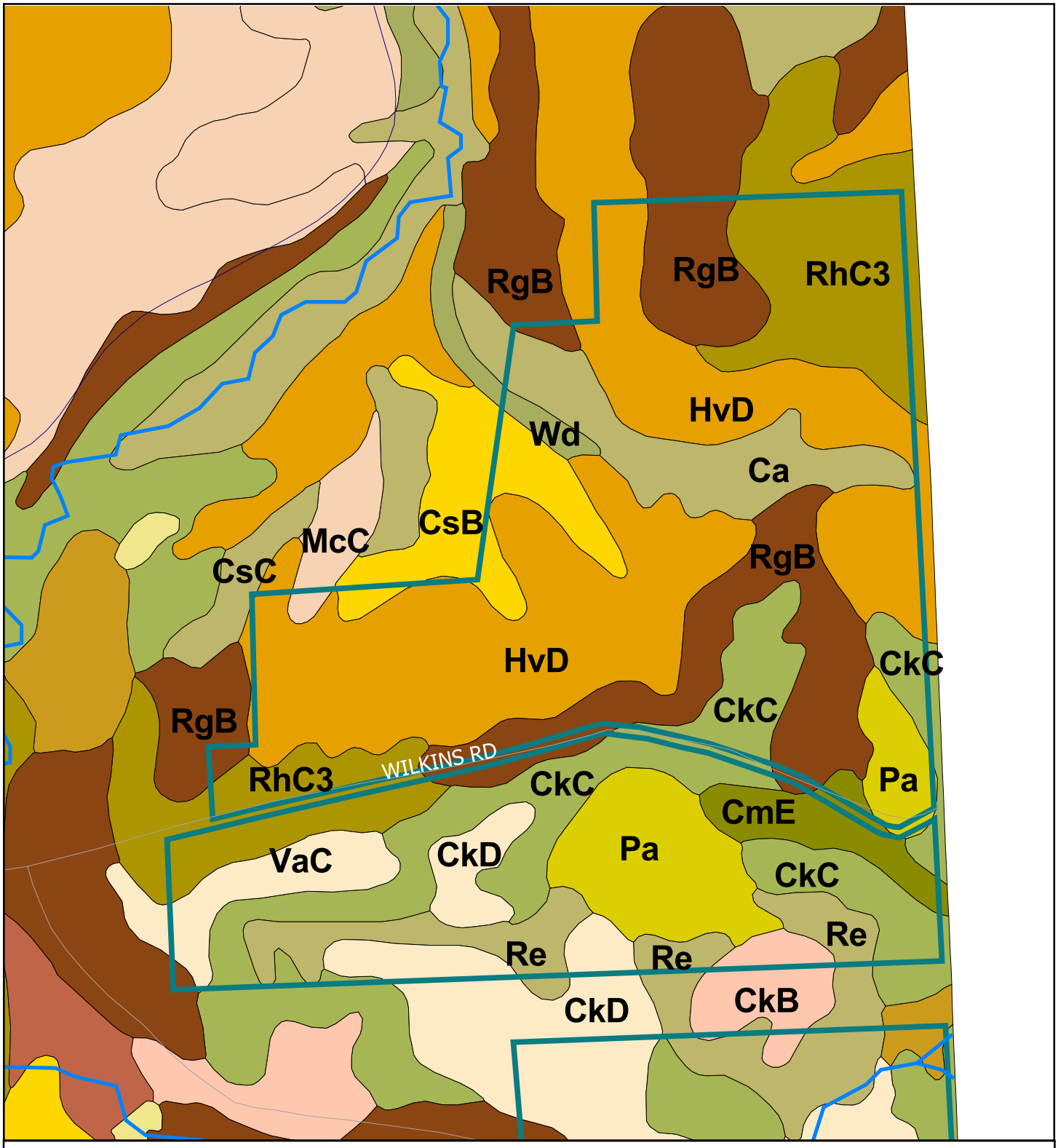
Erie County Forest Management Plan

USGS Topographic Quadrangle

Map Prepared By:
Erie County Soil and Water Conservation District

N
W E
S

700 0 700 Feet



Erie County Forest Management Plan

Lot #5 - Soil Types

Map Prepared By:
Erie County Soil and Water Conservation District

N
W
E
S

300 0 300 600 Feet

Erie County Soil and Water Conservation District & USDA Natural Resources Conservation Service

Brief Soil Descriptions – Lot 5

For further information refer to the *Soil Survey of Erie County, New York*.

Symbol **Name / Description**

Ca Candice Silt Loam

Deep, nearly level, poorly drained, low lime soil formed in slight depressions of old glacial lake basins. Parent material consists of lake sediments having a high clay content, underlain by calcareous, shaly glacial till. Available water capacity is moderate to high. Permeability is moderate to slow in the surface layer and very slow in the subsoil and substratum. HYDRIC SOIL, CAPABILITY CLASS-IVw, NYS SOIL GROUP-6b, K=.49, T=3

CkB Chenango Gravelly Loam, 3 to 8 Percent Slopes

Deep, gently sloping, well drained, low lime, gravelly loam soil formed mainly in gravel and sand. The available water capacity is low. Permeability is moderate to rapid in the surface soil and subsoil and generally rapid or very rapid in the substratum. PRIME FARMLAND, POTENTIALLY HIGHLY ERODIBLE LAND, CAPABILITY CLASS-IIs, NYS SOIL GROUP-2B, K=.24, T=3

CkC Chenango Gravelly Loam, 8 to 15 Percent Slopes

Deep, sloping, well drained, low lime, gravelly loam soil formed mainly in gravel and sand. The available water capacity is low. Permeability is moderate to rapid in the surface soil and subsoil and generally rapid or very rapid in the substratum. HIGHLY ERODIBLE LAND, CAPABILITY CLASS-IIIe, NYS SOIL GROUP-5b, K=.24, T=3

CkD Chenango Gravelly Loam, 15 to 25 Percent Slopes

Deep, moderately steep, well-drained, low lime, gravelly loam soil formed mainly in gravel and sand. The available water capacity is low. Permeability is moderate to rapid in the surface soil and subsoil and generally rapid or very rapid in the substratum. HIGHLY ERODIBLE LAND, CAPABILITY CLASS-IVe, NYS SOIL GROUP-6b, K=.24, T=3

CmE Chenango and Palmyra Soils, 25 to 40 Percent Slopes

Deep, very steep, excessively well drained, low lime and high lime, gravelly loam soils formed in gravel and sand. The available water capacity is low to moderate. Permeability is moderate to rapid in the surface soil and subsoil and generally rapid or very rapid in the substratum. HIGHLY ERODIBLE LAND, CAPABILITY CLASS-VIe, NYS SOIL GROUP-9b, K=.24, T=3

CsB Collamer Silt Loam, 3 to 8 Percent Slopes

Deep, gently sloping, moderately well drained, high lime, silty soil formed mainly in silt and very fine sandy lake sediments. The available water capacity is high. Permeability is moderately slow. PRIME FARMLAND, POTENTIALLY HIGHLY ERODIBLE LAND, CAPABILITY CLASS-IIe, NYS SOIL GROUP-3b, K=.49, T=3

CsC Collamer Silt Loam, 8 to 15 Percent Slopes

Deep, sloping, moderately well drained, high lime, silty soil formed mainly in silt and very fine sandy lake sediments. The available water capacity is high. Permeability is moderately slow. HIGHLY ERODIBLE LAND, CAPABILITY CLASS-IIIe, NYS SOIL GROUP-5b, K=.49, T=3

HvD Hudson Silty Clay Loam, 15 to 25 Percent Slopes

Deep, moderately steep, well drained, high lime, silt loam soil formed in clayey glacial lake sediments. The available water capacity is moderate to high. Permeability is moderate to slow in the surface and subsoil layers and slow to very slow in the underlying layers. HIGHLY ERODIBLE LAND, CAPABILITY CLASS-IVe, NYS SOIL GROUP-7b, K=.49, T=3

Pa Palms Muck

Deep, nearly level, very poorly drained, medium lime, muck soil formed in organic deposits and underlain by loamy mineral soil material at depths of 16 inches or more. The available water capacity is generally high. Permeability is moderately rapid in the organic layers and moderate in the loamy material. Subject to wind erosion and subsidence when drained. No K or T values are assigned. HYDRIC SOIL, CAPABILITY CLASS-Vw, NYS SOIL GROUP-10 (6b WHEN DRAINED)

Re Red Hook Silt Loam

Deep, nearly level, somewhat poorly drained, medium lime, silt loam soil formed in gravelly deposits. The available water capacity is generally low. Permeability is moderate. CAPABILITY CLASS-IIIw, NYS SOIL GROUP-5b, K=.39, T=3

RgB Rhinebeck Silt Loam, 3 to 8 Percent Slopes

Deep, gently sloping, somewhat poorly drained, medium to high lime, silt loam soil formed in clayey lake sediments. The available water capacity is moderate to high. Permeability is very slow. PRIME FARMLAND (WHERE DRAINED), POTENTIALLY HIGHLY ERODIBLE LAND, CAPABILITY CLASS-IIIw, NYS SOIL GROUP-5b, K=.49, T=3

RhC3 Rhinebeck Silty Clay Loam, 8 to 15 Percent Slopes, Severely Eroded

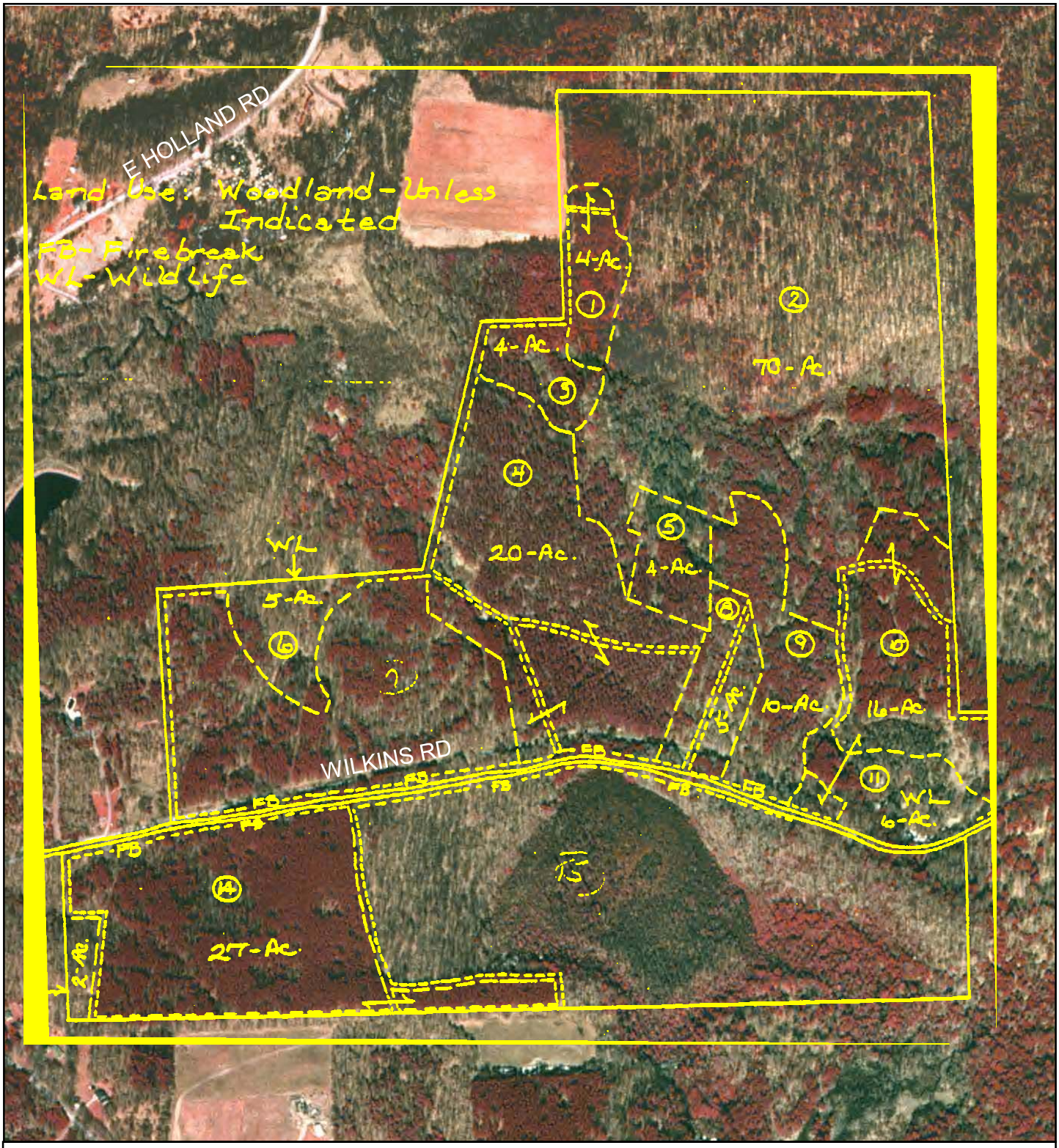
Deep, sloping, somewhat poorly drained, medium to high lime, silt loam soil formed in clayey lake sediments. The available water capacity is moderate to high. Permeability is very slow. HIGHLY ERODIBLE LAND, CAPABILITY CLASS-IVe, NYS SOIL GROUP-7b, K=.49, T=3

VaC Valois Gravelly Silt Loam, 8 to 15 Percent Slopes

Deep, sloping, well drained, low lime, gravelly silt loam soil formed in coarse loamy glacial till. The available water capacity is low to moderate. Permeability is moderate to rapid. HIGHLY ERODIBLE LAND, CAPABILITY CLASS-IIIe, NYS SOIL GROUP-5b, K=.24, T=3

Wd Wayland Silt Loam

Deep, nearly level, poorly to very poorly drained, medium lime, silt loam soil formed in silty stream deposits. The available water capacity is high. Permeability is moderate to moderately slow in the surface soil and generally slow in the underlying layers. HYDRIC SOIL, CAPABILITY CLASS-Vw, NYS SOIL GROUP-8b, K=.43, T=3



1965 Conservation Plan Map

Lot #5

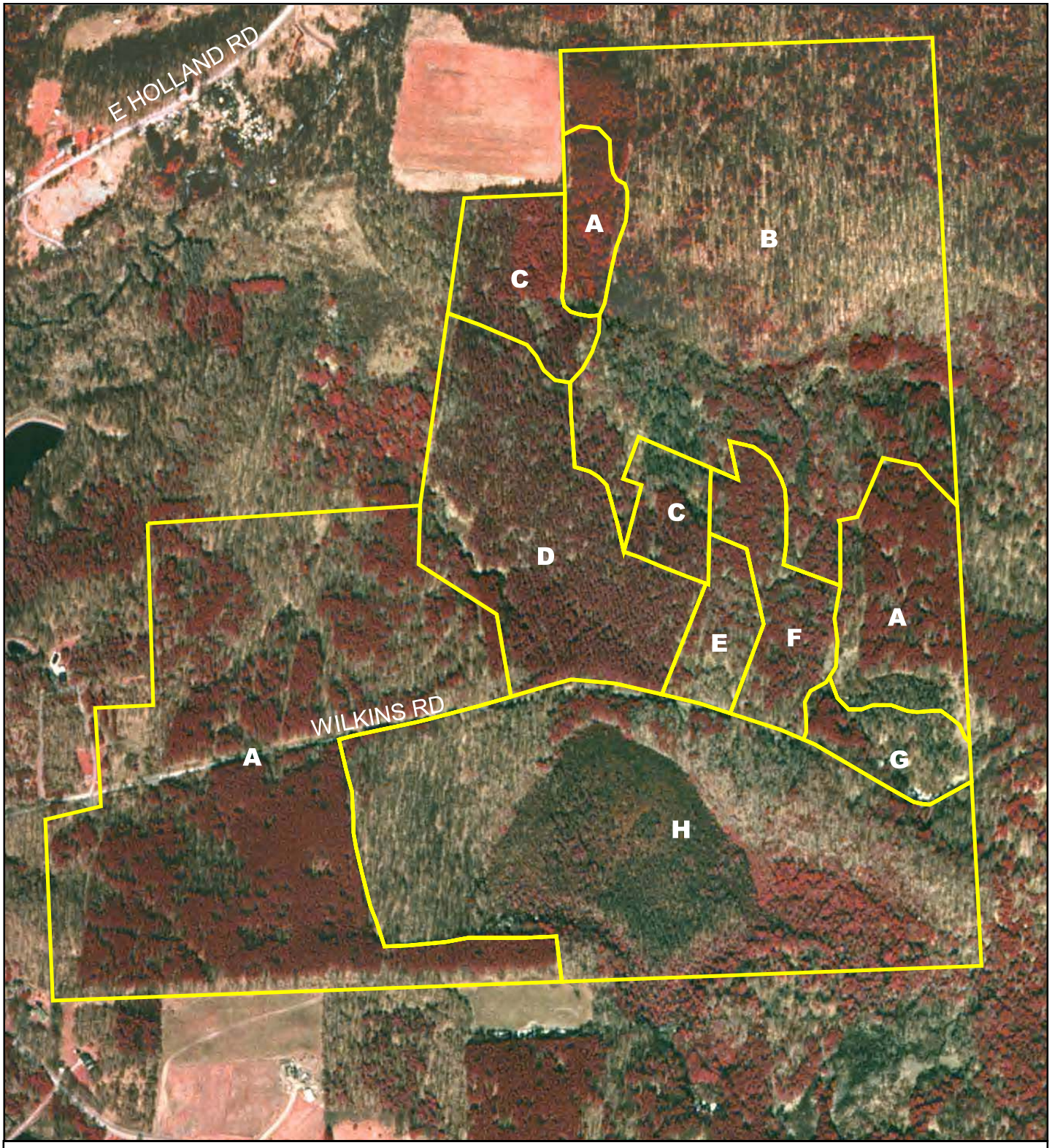
Erie County
Forest Management Plan

Map Prepared By:
Erie County Soil and Water
Conservation District

* Basemap Source: 1995 Color IR Orthophotography

N
W
E
S

0 600 Feet



2003 Stewardship Recommendation Map

Erie County
Forest Management Plan

Lot #5

Map Prepared By:
Erie County Soil and Water
Conservation District

* Basemap Source: 1995 Color IR Orthophotography

N
W
E
S

200 0 200 400 600 Feet